



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# INDEX

- ABBOT, C. G. A New Method of Determining the Solar Constant of Radiation, 4.
- . The Larger Opportunities for Research in the Relations of Solar and Terrestrial Radiation, 82.
- . New Observations on the Variability of the Sun, 674.
- Absorption spectra (King), 63.
- Acid-combining capacity (Cohn), 256.
- Adsorption in charcoals (Harkins and Ewing), 49.
- Age distribution of a population (Pearl), 427.
- Altitude, effect on hemato-respiratory functions (Henderson), 62.
- Amblystoma embryos (Detwiler), 695.
- American Astronomical Union (Campbell and Stebbins), 349.
- Ancestral influence (Laughlin), 235.
- ANDERSON, J. A. Spectra of Explosions, 42.
- Anesthetics, effect on cells (Medes and McClendon), 243.
- Anthropometry of Siouans, 131.
- Antipyretic drugs (Barbour and Herrmann), 136.
- Ants, thermokinetics of (Shapley), 204.
- Ants, (Shapley), 687.
- ARMSBY, H. P., FRIES, J. A., and BRAMAN, W. W. The Carbon Dioxide: Heat Ratio in Cattle, 263.
- Atlantis (Matthew), 17.
- BABCOCK, E. B., and COLLINS, J. F. Interspecific Hybrids in *Crepis*, 670.
- Bacillus Acidophilus (Cheplin and Rettger), 423, 704.
- Bacteria, reducing power of (Glaser), 272.
- BAILEY, I. W. The Formation of the Cell Plate in the Cambium of the Higher Plants, 197.
- BAITSELL, G. A. The Development of Connective Tissue in the Amphibian Embryo, 77.
- Ballistics of rifle (Webster), 289.
- Ballistics, interior (Webster), 648.
- Ballistic measurements (Thompson *et al.*), 169.
- BARBOUR, H. G., and HERMANN, J. B. On the Mechanism of Fever Reduction by Drugs, 136.
- BARNETT, J. A. Functionals Invariant under One-Parameter Continuous Groups of Transformations in the Space of Continuous Functions, 200.
- BARTELL, F. E. Anomalous Osmose, 306.
- BARUS, C. An Example of Torsional Viscous Retrogression, 1.
- . The Torsional Magnetic Energy Absorption of an Iron Conductor, 59.
- . Note on a Pneumatic Method of Measuring Variations of the Acceleration of Gravity, 495.
- . Note on Torsional Measurement of Variations of the Acceleration of Gravity by Interference Methods, 498.
- BATEMAN, H. On a Differential Equation Occurring in Page's Theory of Electromagnetism, 528.
- BAUER, L. A. Some of the Chief Problems in Terrestrial Magnetism and Electricity, 572.
- Behavior studies on Hermit Crabs (Cowles), 40.
- BENEDICT, F. G. The Basal Metabolism of Boys from 1 to 13 Years of age, 7.
- BERRY, E. W. Fossil Plants from the Late Cretaceous of Tennessee, 333.
- Binaural location of sound (Stewart), 166.
- BLACKWOOD, O. The Existence of Homogeneous Groups of Large Ions, 253.
- Blood concentration (Underhill *et al.*), 692.
- BOAS, F. The Influence of Environment upon Development, 489.
- BOGERT, J., see Underhill, F. P., 79.
- Botrychium (Campbell), 502.
- BOWEN, N. L. Differentiation by Deformation, 159.
- BOWIE, W. Present Status of Geodesy and Some of the Problems of This Branch of Geophysics, 545.
- BOWIE, W., see Cross, W., 706.
- Boys, metabolism of (Benedict), 7.
- BRAMAN, W. W., see Armsby, H. P., 263.
- Breeding of cattle (Pearl), 225.
- BRIDGES, C. B. The Mutant Cross-veinless in *Drosophila Melanogaster*, 660.
- BRIDGES, C. B., see Morgan, T. H., 162.
- BRIDGMAN, P. W. Further Measurements of the Effects of Pressure on Resistance, 505.
- $\gamma$ -Rays (Kovarik), 105.
- Calcium metabolism (Underhill *et al.*), 79.
- Calendars of Central America (Spinden), 56.
- Cambium, cell plates in (Bailey), 197.
- Camarasaurus (Osborn and Mook), 15; (Gregory), 16.
- CAMPBELL, D. H. The Genus *Botrychium* and Its Relationships, 502.

- CAMPBELL, W. W. Report of the Meetings of the International Research Council and of the Affiliated Unions held at Brussels, July 18-28, 1919, 340.
- CAMPBELL, W. W., and STEBBINS, J. Report on the Organization of the International Astronomical Union, 349.
- Cancer in Mice (Murphy), 35.
- Capella, orbit of (Michelson), 474.
- Carbon dioxide: heat ratio (Armsby *et al.*), 263.
- CASTLE, W. E. Model of the Linkage System of Eleven Second Chromosome Genes of *Drosophila*, 73.
- Cattle, breeding of (Pearl), 225.
- Census of U. S. (Pearl and Reed), 275.
- Central American Calendars (Spinden), 56.
- Cell plate formation (Bailey), 197.
- Cervical ganglia (Meltzer), 532.
- Charcoal activation (Sheldon), 178.
- Charcoals, adsorption in (Harkins and Ewing), 49.
- CHEPLIN, H. A., and RETTGER, L. F. Studies on the Transformation of the Intestinal Flora, with Special Reference to the Implantation of *Bacillus Acidophilus*, I. Feeding Experiments with Albino Rats, 423. II. Feeding Experiments with Man, 704.
- Chondrules in Meteorites (Merrill), 449.
- Chromosome genes, linkage of (Castle), 73.
- Climate, affected by solar radiation (Abbot), 82.
- COHN, E. J. The Relation between the Isoelectric Point of a Globulin and Its Solubility and Acid Combining Capacity in Salt Solution, 256.
- Cold and plant growth (Coville), 434.
- COLLINS, J. F., see Babcock, E. B., 670.
- Color index of giant stars (Shapley), 293.
- Conduction of electricity (Hall), 139; of heat (Hall), 613.
- Conformal mapping (Gronwall), 300, 312.
- Connective tissue, development of (Baitsell), 77.
- COVILLE, F. V. The Influence of Cold in Stimulating the Growth of Plants, 434.
- COWLES, R. P. The Transplanting of Sea Anemones by Hermit Crabs, 40.
- Cows, temperature of (Kriss), 539.
- CROSS, W., *Chairman*. The Kilauea Volcano Observatory, 706.
- Crabs, behavior of (Cowles), 40.
- Crossing-over (Detlefsen), 663.
- Cubic curves (McDonald), 702.
- Dairy cattle (Pearl), 225.
- DALY, R. A. A General Sinking of Sea-Level in Recent Time, 246.
- DAVIS, H. N., see Shapley, H., 486.
- DAY, A. L., see Cross, W., 706.
- Deformation, differentiation by (Bowen), 159.
- DETLEFSEN, J. A. Is Crossing-Over a Function of Distance? 663.
- DETWILER, S. R. On the Hyperplasia of Nerve Centers Resulting from Excessive Peripheral Loading, 96.
- . Functional Regulation in Animals with Composite Spinal Cords, 695.
- Development, influence of environment (Boas), 489.
- Differential equations, seminvariants of (Stouffer), 645.
- Differentiation by deformation (Bowen), 159.
- Distribution, geographical, and relationship (Metcalf), 432.
- Dinosaur (Osborn and Mook), 15; (Gregory), 16.
- Drosophila melanogaster*, mutant cross-veinless (Bridges), 660.
- Drosophila*, linkage in (Castle), 73.
- Drosophila*, genes in (Metz), 164.
- Drosophila virilis*, sterility in mutants (Metz), 421.
- Drosophila virilis*, genes and linkage (Weinstein), 625.
- DUANE, W., and PATTERSON, R. A. Characteristic Absorption of X-Rays: I, Series, 509.
- DUANE, W., and PATTERSON, R. A. On the Relative Positions and Intensities of Lines in X-Ray Spectra, 518.
- DUANE, W., and STENSTRÖM, W. On the K Series of X-Rays, 477.
- DUANE, W., FRICKE, H., and STENSTRÖM, W. The Absorption of X-Rays by Chemical Elements of High Atomic Numbers, 607.
- DURAND, W. F. Shock or Water Ram in Pipe Lines with Imperfect Reflection at the Discharge End and Including the Effects of Friction and Non-Uniform Change of Valve Opening, 441.
- DUTCHER, R. A. The Nature and Function of Antineuritic Vitamine, 10.
- Dynamics of growth (Reed), 397.
- L. P. EISENHART. The Permanent Gravitational Field in the Einstein Theory, 679.
- Elastico-viscous flow (Michelson), 122.
- Electrolytic solutions (Hitchcock), 186.
- Electric conduction (Hall), 139.
- Electromagnetism, kinematical interpretation (Page), 115.
- Electromagnetic theory (Bateman), 528.
- Embryo, connective tissue in (Baitsell), 77.
- Encephalitis (Flexner), 103.
- Environment and heredity (Wright), 320.
- Environment, influence on development (Boas), 489.
- EWING, D. T., see Harkins, W. D., 49.
- Exostosis, multiple (Underhill *et al.*), 79.
- Explosions, spectra of (Anderson), 42.

- Eye-defects, transmission of (Guyer and Smith), 135.
- Fermat's Theorem (Vandiver), 266, 416.
- Fertilization, selective (Jones), 66.
- Fertilizer experiments (Lipman and Linhart), 684.
- Fever reduction (Barbour and Herrmann), 136.
- FLEXNER, S. Encephalitis and Poliomyelitis, 103.
- Fluorescence (Nichols and Wilbur), 693.
- FOLEY, A. L. A Photographic Method of Finding the Instantaneous Velocity of Sound Waves at Points Near the Source, 310.
- Fossil plants (Berry), 333.
- FRICKE, H., see Duane, W., 607.
- FRIES, J. A., see Armsby, H. P., 263.
- Functionals, invariance of (Barnett), 200.
- Furnace spectra (King), 63, 65.
- Furnace, tube resistance (King), 701.
- Ganglia, cervical (Meltzer), 532.
- Gas, specific heat (Webster), 303.
- Genes, order of (Morgan *et al.*), 162 (Metz) 164.
- Geometrical Products (Moore and Phillips), 135.
- GLASER, R. W. The Effect of the Concentration of Nitrates on the Reducing Powers of Bacteria, 273.
- Globulin, isoelectric point (Cohn), 256.
- GODDARD, R. H. The Possibilities of the Rocket in Weather Forecasting, 493.
- Gravitational theory (Eisenhart), 679.
- Gravity, measurement of (Barus), 495, 498.
- GREGORY, H. E., see Cross, W., 706.
- GREGORY, W. K. Restoration of Camarasaurus and Life Model, 16.
- GRONWALL, T. H. On the Distortion in Conformal Mapping when the Second Coefficient in the Mapping Function has an Assigned Value, 300.
- . Conformal Mapping of a Family of Real Conics on Another, 312.
- Groups of operators (Miller), 70.
- Groups, structure of (Zeldin), 541.
- Growth influenced by cold (Coville), 434.
- Guinea-pigs, piebald pattern (Wright), 320.
- GUYER, M. F., and SMITH, E. A. Transmission of Eye-Defects Induced in Rabbits by Means of Lens-Sensitized Fowl-Serum, 135.
- HALL, E. H. Inferences from the Hypothesis of Dual Electric Conduction; the Thomson Effect, 139.
- . The Thomson Effect and Thermal Conduction in Metals, 613.
- HARDY, A. C. A Study of the Persistence of Vision, 221.
- HARKINS, W. D., and EWING, D. T. An Apparent High Pressure Due to Adsorption, the Heat of Adsorption and the Density of Gas-Mask Charcoals, 49.
- HARKINS, W. D. The Ionization of Strong Electrolytes, 601.
- Hawaiian Islands, Weather Bureau (Cross *et al.*), 706.
- Heat production in platinum black (Loeb), 107.
- HECHT, S. Human Retinal Adaptation, 112.
- Hemato-respiratory functions (Henderson), 62.
- HENDERSON, Y. The Adjustment to the Barometer of the Hemato-Respiratory Functions in Man, 62.
- Heredity and environment (Wright), 320.
- Heredity in man (Laughlin), 235.
- HERRMANN, J. B., see Barbour, H. G., 136.
- HICKMAN, C. N., see Thompson, L. T. E., 169.
- High-tension D. C. (Webster), 269.
- HILL, A. J., see Johnson, T. B., 290.
- HITCHCOCK, F. L. A Thermodynamic Study of Electrolytic Solutions, 186.
- HONEIJ, J. A., see Underhill, F. P., 79.
- Hormones dependent on vitamins (Dutcher), 10.
- Horns, experiments on (Webster), 316.
- HOYT, F. C. The Intensities of X-Rays of the L-Series, III. Critical Potentials of the Platinum and Tungsten Lines, 639.
- Hybrids in *Crepis* (Babcock and Collins), 670.
- Hydrogen-ion concentration in the intestine (McClendon), 690.
- Hydrogen, negative carriers in (Loeb), 435.
- Hyperplasia of nerve centers (Detwiler), 96.
- Influenza (Underhill *et al.*), 692.
- Intensifier for telescope (Shapley), 127.
- Interference methods in astronomy (Michelson), 474.
- Interferometer, vertical (Michelson), 473.
- Interferometric methods (Barus), 498.
- International Astronomical Union (Campbell and Stebbins), 349.
- International Research Council (Campbell), 340.
- Intestinal flora (Cheplin and Rettger), 423, 704.
- Intestine, hydrogen-ion concentration in (McClendon), 690.
- Invariance of functionals (Barnett), 200.
- Involutions on a cubic (McDonald), 702.
- Ions, negative, in  $H_2$  and  $N_2$  (Loeb), 435.
- Ionization of solutions (Noyes and MacInnes), 18.
- Ions, mobility (Blackwood), 253.
- Isothiocyanates (Johnson *et al.*), 290.
- Jersey cattle (Pearl), 225.
- JOHNSON, T. B., HILL, A. J., and KELSEY, E. B. Alkyl Amides of Isothiocyanacetic Acid, 290.

- JONES, D. F. Selective Fertilization in Pollen Mixtures, 66.
- KELSEY, E. B., see Johnson, T. B., 290.
- Kilauea Volcano Observatory (Cross *et al.*), 706.
- Kinematical interpretation of electromagnetism (Page), 115.
- KING, A. S. A Study of Absorption Spectra with the Electric Furnace, 63.
- . A Study of the Effect of a Magnetic Field on Electric Furnace Spectra, 65.
- . Experiments with the Tube Resistance Furnace on the Effect of Potential Difference, 701.
- KLING, J. R. A New Proof of a Theorem Due to Schoenflies, 529.
- KOVARIK, A. F. A Statistical Method for Studying the Radiations from Radioactive Substances and the X-Rays and Its Application to some  $\gamma$ -Ray Problems, 105.
- KRISS, M. Observations of the Body Temperature of Dry Cows, 539.
- LAUGHLIN, H. H. Calculating Ancestral Influence in Man, 235.
- Lens-sensitized serum (Guyer and Smith), 135.
- Leprosy (Underhill *et al.*), 79.
- Leptospira icteroides (Noguchi), 110.
- Light, velocity of (Michelson), 476.
- LINHART, G. A. A Simplified Method for the Statistical Interpretation of Experimental Data, 682.
- LINHART, G. A., see Lipman, C. B., 684.
- Linkage in *Drosophila virilis* (Weinstein), 625.
- LIPKA, J. Motion on a Surface for Any Positional Field of Force, 621.
- LIPMAN, C. B., and LINHART, G. A. A Critical Study of Fertilizer Experiments, 684.
- LITTLE, C. C. A Note on the Human Sex Ratio, 250.
- LITTLEHALES, G. W. The Problems and Functions of the Section of Physical Oceanography of the American Geophysical Union, 580.
- LOEB, L. B. On the Nature of the Heat Production in a System of Platinum Black, Alcohol, and Air, 107.
- . On the Nature of the Negative Carriers Produced in Pure Hydrogen and Nitrogen by Photo-Electrons, 435.
- LOEB, J. The Influence of Ions on the Osmotic Pressure of Solutions, 211.
- LOTKA, A. J. Analytical Note on Certain Rhythmic Relations in Organic Systems, 410.
- Luminescence (Nichols and Wilbur), 693.
- LUNN, A. C. The Commutativity of One-Parameter Transformation in Real Variables, 24.
- MACINNES, D. A., see Noyes, A. A., 18.
- Magnetism in iron (Barus), 59.
- Magnitudes in clusters (Shapley), 293.
- Magnitudes in star clusters (Shapley and Davis), 486.
- Maize, fertilization experiments on (Jones) 66.
- MARVIN, C. F. The Status and Problems of Meteorology, 561.
- MATTHEW, W. D. Plato's Atlantis in Palaeogeography, 17.
- MCDONALD, J. H. An Application of the Porism of Four Tangents of a Twisted Cubic, 702.
- MCCLENDON, J. F. Hydrogen-Ion Concentration of the Contents of the Small Intestine, 690.
- MCCLENDON, J. F., see Medes, G., 243.
- MEDES, G., and MCCLENDON, J. F. The Effect of Anesthetics on Living Cells, 243.
- MELTZER, S. J. Are the Superior Cervical Ganglia Indispensable to the Maintenance of Life? 532.
- MERRILL, G. P. On Chondrules and Chondritic Structure in Meteorites, 449.
- Messier 3, magnitudes in (Shapley and Davis), 486.
- Metabolism of boys (Benedict), 7.
- Metabolism of cattle (Armsby *et al.*), 263.
- METCALF, M. M. Upon an Important Method of Studying Problems of Relationship and of Geographical Distribution, 432.
- Meteorites, chondrules in (Merrill), 449.
- METZ, C. W. The Arrangement of Genes in *Drosophila Virilis*, 164.
- . Observations on the Sterility of Mutant Hybrids in *Drosophila Virilis*, 421.
- MICHELSON, A. A. The Laws of Elastic-Viscous Flow, II, 122.
- . The Vertical Interferometer, 473.
- . On the Application of Interference Methods to Astronomical Measurements, 474.
- . A Modification of the Revolving Mirror Method for Measuring the Velocity of Light, 476.
- Milk (Cheplin and Rettger), 423, 704.
- MILLER, G. A. Groups Generated by Two Operators,  $s_1, s_2$ , Which Satisfy the Condition  $s_1^m = s_2^n, (s_1 s_2)^k = 1, s_1 s_2 = s_2 s_1$ , 70.
- Mobility of ions (Blackwood), 253.
- MOOK, C. C., see Osborn, H. F., 15.
- MOORE, C. L. E., and PHILLIPS, H. B. Note Geometrical Products, 135.
- MORGAN, T. H., STURTEVANT, A. H., and BRIDGES, C. B. The Evidence for Linear Order of Genes, 162.
- MURPHY, J. B. The Effect of Physical Agents on the Resistance of Mice to Cancer, 35.
- Mutant hybrids (Metz), 421.

- Mutant in *Drosophila* (Bridges), 660.  
 MYERS, C. N., and VOEGTLIN, C. The Chemical Isolation of Vitamines, 3.
- NATIONAL ACADEMY OF SCIENCES.  
 Report of the Autumn Meeting, 43.  
 —. Report of the Annual Meeting, 442.  
 —. Grants from Trust Funds, 445.  
 —. Committee Report on the Kilauea Volcano Observatory, 706.
- NATIONAL RESEARCH COUNCIL. Minutes of Executive Board, 335.
- Nerve centers, hyperplasia of. (Detwiler), 96.
- Nervous system (Detwiler), 695.
- NICHOLS, E. L., and WILBUR, D. T. Luminescence at High Temperatures, 693.
- Nitrates, effect on reducing power (Glaser), 272.
- NOGUCHI, H. *Leptospira Icteroides* and Yellow Fever, 110.
- NOYES, A. A., and MACINNES, D. A. The Ionization and Activity of Largely Ionized Substances, 18.
- Nuclear activity (Tennent), 217.
- Organic systems, rhythm in (Lotka), 410.
- OSBORN, H. F., and MOOK, C. C. Reconstruction of the Skeleton of the Sauropod Dinosaur *Camarasaurus Cope* (*Morosaurus Marsh*), 15.
- Osmose, anomalous (Bartell), 306.
- Osmosis in solutions (Loeb), 211.
- PAGE, L. A Kinematical Interpretation of Electromagnetism, 115.
- PATTERSON, R. A., see Duane, W., 509, 518.
- PEARL, R. A Contribution of Genetics to the Practical Breeding of Dairy Cattle, 225.  
 —. On a Single Numerical Index of the Age Distribution of a Population, 427.
- PEARL, R., and REED, L. J. On the Rate of Growth of the Population of the United States since 1790 and Its Mathematical Representation, 275.
- Persistence of vision (Hardy), 221.
- PHILLIPS, H. B., see Moore, C. L. E., 135.
- Photoreception (Hecht), 112.
- Platinum black, heat production in (Loeb), 107.
- Platinum, critical potentials (Webster), 26.
- Poliomyelitis (Flexner), 103.
- Population growth (Pearl and Reed), 275.
- Population, age distribution in (Pearl), 427.
- Potentials, critical, of platinum and tungsten (Hoyt), 639.
- Pressure, effect on resistance (Bridgman), 505.
- Protein requirement for man (Sherman), 38.
- Products in geometry (Moore and Phillips), 135.
- Pterergates in *Pogonomyrmex* (Shapley), 687.
- Radiation from Sun (Abbot), 4, 82.
- Radioactive radiations (Kovarik), 105.
- REED, H. S. The Dynamics of a Fluctuating Growth Rate, 397.
- REED, L. J., see Pearl, R., 275.
- Regulation, functional (Detwiler), 695.
- REID, H. F., see Cross, W., 706.
- Relationship and geographical distribution (Metcalf), 432.
- Relativity (Eisenhart), 679.
- Report of the Autumn Meeting of the ACADEMY, 43.
- Report of the Annual Meeting of the ACADEMY, 442.
- Resistance, effect of pressure on (Bridgman), 505.
- Retinal adaptation (Hecht), 112.
- RETTGER, L. F., see Cheplin, H. A., 423, 704.
- Rhythm in organic systems (Lotka), 410.
- RIFFOLT, N., see Thompson, L. T. E., 169.
- RINGER, M., see Underhill, F. P., 692.
- Rockets in weather forecasting (Goddard), 493.
- Schoenflies' theorem (Kline), 529.
- Sea-level sinking (Daly), 246.
- Seismology (Cross *et al.*), 706.
- Seminvariants of differential equations (Stouffer), 645.
- Sex-ratio in man (Little), 250.
- SHAPLEY, H. Note on a Simple Device for Increasing the Photographic Power of Large Telescopes, 127.
- . Thermokinetics of *Liometopum Apiculatum* Mayr, 204.
- . Studies of Magnitudes in Star Clusters, XI. Frequency Curves of the Absolute Magnitude and Color Index for 1152 Giant Stars, 293.
- . Preliminary Report on Pterergates in *Pogonomyrmex Californicus*, 687.
- SHAPLEY, H., and DAVIS, H. N. Studies of Magnitude in Star Clusters, XII. Summary of a photometric investigation of the globular system, Messier 3, 486.
- SHELDON, H. H. Charocal Activation, 178.
- SHERMAN, H. C. The Protein Requirement of Maintenance in Man, 38.
- Spectroscopy with tube resistance furnace (King), 701.
- Spectra of explosions (Anderson), 42.
- Ship, starting of (Whittemore), 182.
- Siouans, anthropometry of, 131.
- SMITH, E. A., see Guyer, M. F., 135.
- Social insects (Shapley), 687.

- Solar constant (Abbot), 4.  
 Solar radiation (Abbot), 82.  
 Solubility of globulin (Cohn), 256.  
 Solutions, osmotic pressure in (Loeb), 211.  
 Solutions, ionization in (Noyes and MacInnes), 18.  
 Solutions, osmotic pressure (Bartell), 306.  
 Solutions, thermodynamics of (Hitchcock), 186.  
 SOSMAN, R. B. An Outline of Geo-physical-Chemical Problems, 592.  
 Sound, location of (Stewart), 166.  
 Sound, velocity of (Foley), 310.  
 Specific heat of gases (Webster), 303.  
 Spectra, absorption, in electric furnace (King), 63.  
 Spectrum in X-Rays from platinum (Webster), 26.  
 SPINDEN, H. J. Central American Calendars and the Gregorian Day, 56.  
 Star clusters (Shapley), 293.  
 Star clusters, magnitudes in (Shapley and Davis), 486.  
 Statistical methods (Linhart), 682.  
 STEBBINS, J., see Campbell, W. W., 349.  
 STENSTRÖM, W., see Duane, W., 477, 607.  
 STEWART, G. W. The Functions of Intensity and Phase in the Binaural Location of Pure Tones, 166.  
 STOUFFER, E. B. Seminvariants of a General System of Linear Homogeneous Differential Equations, 645.  
 STURTEVANT, A. H., see Morgan, T. H., 162.  
 SULLIVAN, L. R. Anthropometry of the Siouan Tribes, 131.  
 Sun, variability of (Abbot), 674.  
 Telescopes, increasing photographic power (Shapley), 127.  
 Temperature of dry cows (Kriss), 539.  
 TENNENT, D. H. Evidence of the Nature of Nuclear Activity, 217.  
 Tennessee, fossil plants from (Berry), 333.  
 Temperature effects on ants (Shapley), 204.  
 Thermodynamics of solutions (Hitchcock), 186.  
 THOMPSON, L. T. E., HICKMAN, C. N., and RIFFOLT, N. The Measurement of Small Time Intervals and Some Applications, Principally Ballistic, 169.  
 Thomson effect (Hall), 139, 613.  
 Time, measurement of (Thompson *et al.*), 169.  
 Torsional magnetism (Barus), 59.  
 Transformations, commutative (Lunn), 24.  
 Transformations, groups of (Zeldin), 541.  
 Transplanting limbs in animals (Detwiler), 695.  
 UNDERHILL, F. P., HONEIJ, J. A., and BOGERT, J. Calcium and Magnesium Metabolism in Certain Diseases, 79.  
 UNDERHILL, F. P., RINGER, M., and WILKINS, L. Blood Concentration Changes in Influenza, 692.  
 VANDIVER, H. S. On Kummer's Memoir of 1857 Concerning Fermat's Last Theorem, 266.  
 —. On the Class Number of the Field  $\Omega(e^{2i\pi/p^n})$  and the Second Case of Fermat's Last Theorem, 416.  
 Velocity of light (Michelson), 476.  
 Velocity of sound (Foley), 310.  
 Vibration of air in horns (Webster), 316.  
 Viscosity and elasticity (Michelson), 122.  
 Viscosity, torsional (Barus), 1.  
 Vision, persistence of (Hardy), 221.  
 Vitamine, antineuritic (Dutcher), 10.  
 Vitamines, isolation of (Myers and Voegtlin), 3.  
 VOEGLIN, C., see Myers, C. N., 3.  
 Volcanology (Cross *et al.*), 706.  
 WASHINGTON, H. S. The Problems of Volcanology, 583.  
 Water ram in pipe lines (Durand), 441.  
 Weather Bureau, Hawaii (Cross *et al.*), 706.  
 Weather forecasting (Goddard), 493.  
 WEBSTER, A. G. On the Springfield Rifle and the Leduc Formula, 289.  
 —. On the Connection of the Specific Heats with the Equation of State of a Gas, 303.  
 —. Experiments on the Vibration of Air in Conical Horns, 316.  
 —. On a Condition for Helmholtz's Equation Similar to Lamé's, 605.  
 —. Some New Methods in Interior Ballistics, 648.  
 WEBSTER, D. L. The Intensities of X-Rays of the L Series, II. The Critical Potentials of the Platinum Series, 26.  
 —. An Improved Form of High Tension D. C. Apparatus, 269.  
 WEINSTEIN, A. Homologous Genes and Linear Linkage in *Drosophila Virilis*, 625.  
 WHITTEMORE, J. K. The Starting of a Ship, 182.  
 WILBUR, D. T., see Nichols, E. L., 693.  
 WILKINS, L., see Underhill, F. P., 692.  
 WRIGHT, S. The Relative Importance of Heredity and Environment in Determining the Piebald Pattern of Guinea-Pigs, 320.  
 X-radiation (Kovarik), 105.  
 X-rays, characteristic absorption (Duane and Patterson), 509.  
 X-rays in cancer (Murphy), 35.  
 X-rays, K series (Duane and Stenström), 477.  
 X-rays, intensities of (Webster), 26.  
 X-rays, platinum and tungsten. (Hoyt), 639.  
 X-ray spectra (Duane and Patterson), 518.  
 Yellow fever (Noguchi), 110.  
 Zeeman effect (King), 65.  
 ZELDIN, S. D. On the Structure of Finite Continuous Groups with Exceptional Transformations, 541.